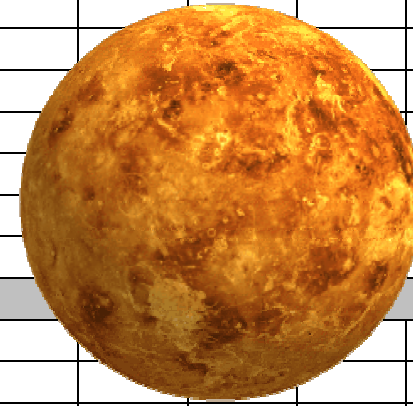
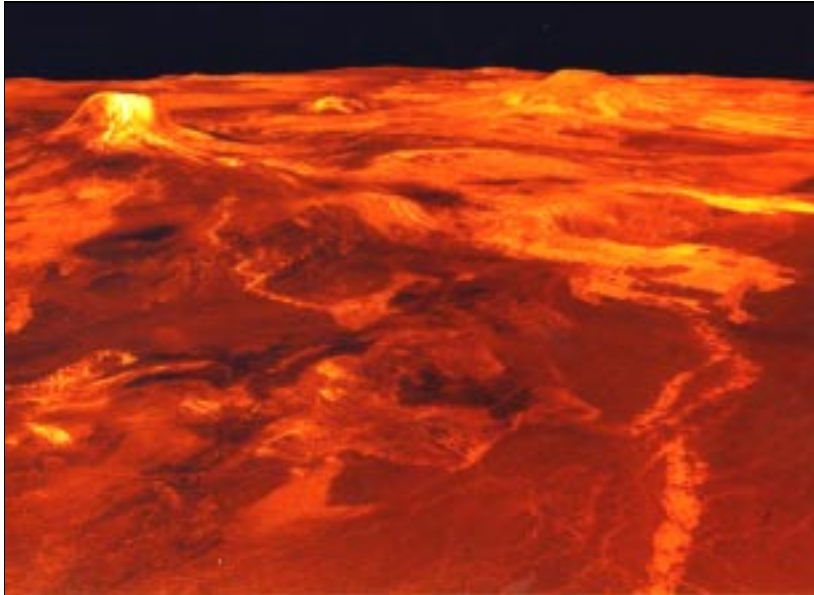


Fast Facts About Venus

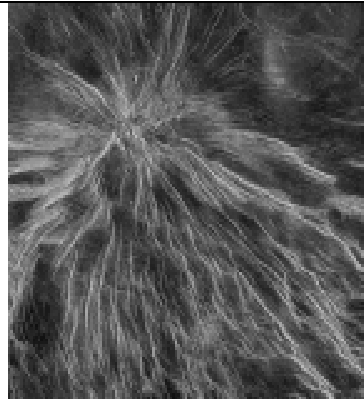
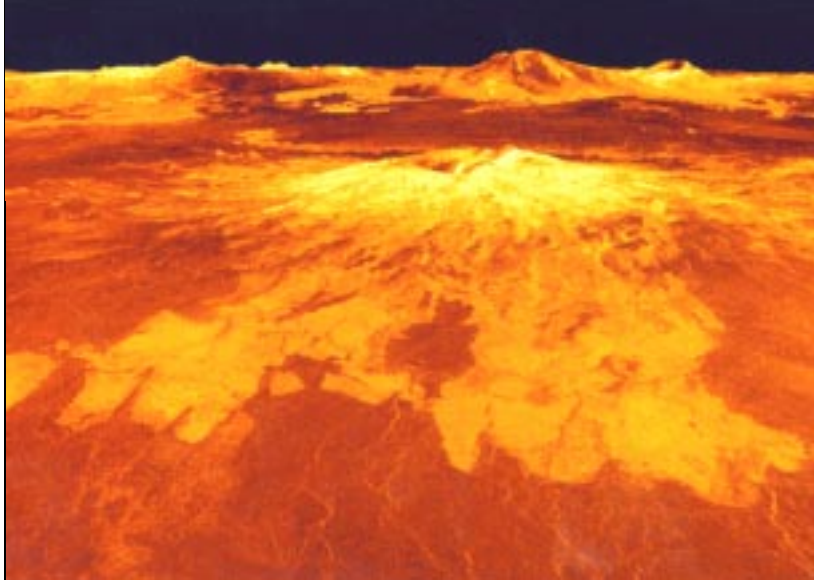
Planetary Parameters		Ratio (Venus/Earth)									
Planet Type	Terrestrial (i.e., a solid, rocky planet like Earth)										
Average Distance from Sun (kilometer)	108,200,000 as compared to Earth's 149,600,000	0.72									
Equatorial Diameter (kilometer)	12,104 as compared to Earth's 12,756	0.95									
Mass (10^{24} kilogram)	4.869 as compared to Earth's 5.9736	0.82									
Volume (10^{10} kilometer ³)	92.843 as compared to Earth's 108.321	0.86									
Average Density (gram/centimeter ³)	5.2 as compared to Earth's 5.52	0.94									
Surface Gravity (meter/second ²)	8.87 as compared to Earth's 9.78	0.91									
Magnetic Field (gauss-Rh ³)	None detectable										
Orbital Parameters											
Year Length (One Orbit Around the Sun)	224.7 Earth days										
Day Length (One Rotation on its Axis)	243.7 Earth days										
Inclination of Axis (degrees)	177.3 as compared to Earth's 23.45										
Atmosphere and Climate											
Average Surface Temperature (C)	464 as compared to Earth's 14.8										
Maximum Temperature (C)	484 as compared to Earth's 47										
Minimum Temperature (C)	377 as compared to Earth's -33										
Atmospheric Pressure at Surface	92 bar (Earth = 1 bar). This pressure exerts a force of 65 kg/m ³ as compared to Earth's atmosphere that exerts a force of 1.217 kg/m ³ at sea level.										
Major Atmospheric Gasses	96.5% Carbon Dioxide, 3.5% Nitrogen, 20 ppm Water										
Summary of Water	No surface water or rainfall										
Summary of Climate	Intense greenhouse effect										
Planetary Features											
General Overview	Planet hidden under sulfuric acid clouds. 85% of surface is volcanic rock and lava flows. 15% is mountainous terrain deformed by geologic activity. According to recent reports, the large amount of volcanic surface material suggests that Venus has gotten hot enough to completely melt the surface several times over its history.										
Composition of Poles											
Core Composition											
Known Moons/Rings	No moons, no rings										
Visits to Venus											
1950-69	1962: Mariner 2 (US), fly-by										
1970-79	1970: Venera 7 (USSR), failed landing; 1972: Venera 8 (USSR), lander, sent an hour of data; 1974: Mariner 10 (US), flyby; Venera 9 (USSR), orbiter; 1978: Pioneer Venus Orbiter (US), also dropped four probes.										
1980-99	1984: Veneras 15 & 16 (USSR), orbiters that mapped the surface and analyzed the atmosphere; 1984: Vegas 1 and 2 (USSR), dropped landers & probe; 1989: Magellan (US), orbite										



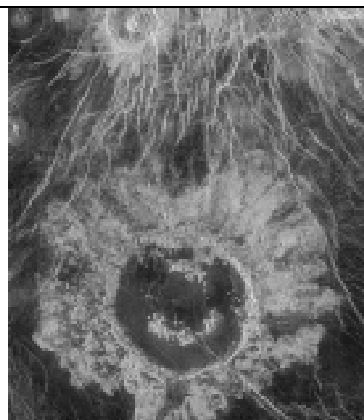
Some Views of the Planet Venus



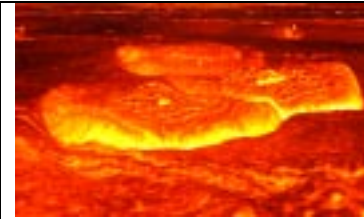
1) The regions of Venus pictured above and below are far apart. Even so, volcanic features such as lava channels, volcanos, and large-scale lava flows predominate. The volcano Gula Mons (above, left) is 3 km high & 1310 km away. The volcano Sapas Mons (below, front) is 1.5 km high, 400 km across, & 527 km away. Sheets of hardened lava cover its slopes.



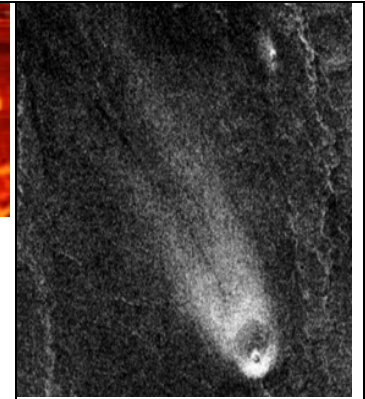
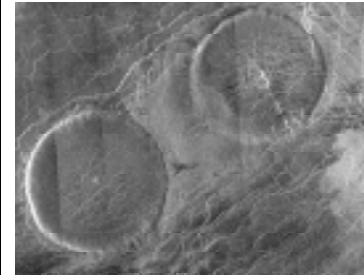
2) This image is 250 km across. It shows a radial fracture pattern (called a *Nova*). Novae occur when magma rises toward the surface, bulging it upward. Fractures radiate out from the center of the bulge. In some places, the magma breaks through the surface, creating lava channels or pancake domes such as the two pictured in Image 3.



5) Bright lava channels surround 72 km Wheatly crater. Compared to other planets, craters on Venus are rare, supporting the idea that the surface has recently melted.



3) Round, flat-topped, steep sided hills occur when thick lava is extruded onto level ground and flows slowly and evenly in all directions. Above, the hills are 750 m tall and 25 km across. Below the hills are 62 km across.



4) This volcano is 5 km across. As it erupted, winds blew the ash and materials in its plume, creating a wind streak 10 km wide and 35 km long. Even with its thick atmosphere and high temperatures, Venus' winds as measured by spacecraft are modest (1 to 3.6 km per hour).



6) Earth's crust stays solid because its internal heat is dispersed by the cool atmosphere. On Venus, the combination of internal heat and a hot atmosphere can raise surface temperatures to above the melting point of rock. The many volcanic features and lack of craters suggest that Venus' crust has completely melted several times. In this image (70 x 160 km), parts of the surface have melted, creating depressions and lava channels.